Work Order ID 54918

Document Control

Memo

DOCUMENT CONTROL

CHG005

Photocopy bluefile & type labels per PPP D206-642-

W/O:		**************************************	WO	RK ORDER CHANGE	ES		ι.	
DATE	STEP	PR	OCEDURE CHAN		Ву	Date Q	Approval Chief Eng / Prod Mgr	'Approva QC Inspecto
•								
Part No	:	PAR #:	Fault Categ	jory:	NCR: Yes	No DQA:	Date:	
	Resolution:							
NCR:			WORK ORDE	R NON-CONFORMA	NCE (NC	R)		
5475		Description of NC		Corrective Action Section		Verificati	on Approval	Approva
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	& Section C		QC Inspecto

Work Order ID 54918

added support.

January 7, 2010 10:51:02 AM

Page 2

Insp.

D206-642-241 Item ID: Reference: **Revision ID:** Item Name: Replacement Skidtube 1/07/10 **Start Date:** Start Oty: 1.00 **Cust Item ID:** Required Date: 1/18/10 Reg'd Oty: 1.00 **Customer ID: Customer Name:** Approvals: Process Plan: Date: **Tooling:** Date: OC: Date: SPC(Y/N): Date: Hours Sequence Work **Operation** Draw Draw Plan Reject Accept Reject ID Set Up Run Center ID **Description** Number Rev. Code **Qty** Qty Number Stamp 110 Skidtubes 0.00 0.00 Skidtubes Skidtubes 1-Deburr Fwd edge of tube Memo 2- Remove ridge on inside of Fwd edge of tube as per Dwg D2650 3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required. Pick: Qty Part Number (Description Batch A/RDD Aluminum Rod MILA 860 /m112507 4-Grind weld flush to cap on top surface only. 5-Cut Aft end as per dwg 2650 from front of tube and Deburr 6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D2650 7-Open holes for Aft end cap as per Dwg D2650 with #30 Drill Bit using DT8025. 8-Drill pilot holes using Dt 8167. 9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" 10/1/19 holes, cleco DT8732 & doubler leaving DT8732 for

W/O:			WORK ORDER CHANGES					, 1			
DATE	STEP		PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	*Approval QC Inspector			
Part No	:	PAR #	: Fault Category:	NCR: Yes	No DQ	A :	Date: _				
	Res	olution:	Disposition:	QA: N/C C	losed:		Date: _				
			WORK OPDER NON-COM	IEODMANCE (NC	21	· · · · · · · · · · · · · · · · · · ·					

NCR:		•	WORK ORDE	ER NON-CONFORMANO	CE (NCR)			
		Description of NC		Corrective Action Section B		Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspecto
					į.			

0.00

Memo

QC6- Inspect dimensions to drawing

QC

Quality Control

120

W/O:		WORK ORDER CH	IANGES			7	1
DATE	STEP	PROCEDURE CHANGE			Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: <u>D206-642-241</u> PAR #: _____ Fault Category: <u>Skiel bles</u>

NCR: (Yes) No DQA:

Resolution: _ re-work

Disposition: <u>ve-wark</u>

QA: N/C Closed:

NCR:5	1918	Wo	ORK OR	DER NON-CONFORMANCE	(NCR)			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section B Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspecto
p/0,),7	110, 10	13 holes are ounten/etageter for Ruts to deal to cloudeten. P.C 'Proces' driven through Al. to SS cause lets of portuns	Baren		BE 1 1901/20 11 10/1120	(0104123	29542	Sidola
						(3/00/28		worky

0.00

0.00

0.00

0.00

BE 10/01/21

Quality Control Memo

QC

Hand Finishing

140

150

HandFinish

Memo

Chemical Conversion Coat per QSI005 4.1

QC3- Inspect Part Finish

W/O:				WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE				У	Date	Qty	Approval Chief Eng / Prod Mgr	'Approval QC Inspector
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	İ]]
Part No	:		PAR #:	Fault Category:	NCR:	Yes N	lo DQ	\ :	_ Date: _	
	F	Resolution:		Disposition:	QA: N	QA: N/C Closed:				

NCR:		V	ORK ORD	ER NON-CONFORMANC	E (NCR)			
		Description of NC		Corrective Action Section B		Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
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Work Order ID 54918

January 7, 2010 10:51:07 AM

Item ID:	D206-642-24	11	Reference:							. Adam . 1000 1000 1000 1000 1000 1000 1000 1	<u> </u>
Revision ID:											
Item Name:	Replacement	Skidtube									
Start Date:	1/07/10	Start Qty: 1.00	Cust Item ID:								
Required Da	nte: 1/18/10	Req'd Qty: 1.00	Customer ID:				Cu	stomer Na	me:		
Approvals:	Process P	lan: Date:	Tooling:		Dat	te:					
	QC: _	Date:	SPC (Y/N):			te:					
			Hou	rs				 ·			
Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Skidtubes		0.00	0.00							
Skidtubes		Skidtubes	\							-	
	Memo	1-Open holes to finished size as per Dwg D26: D2650-3 Drilling Detail (without cutting fluid) 2-C'sink crossbolt spacer holes as per Dwg D2650(without cutting fluid) 3-Deburr and blow out all chips from inside the tube	d)		H 10/1	//21					
170 Quality Con	QC ntrol Memo	QC6- Inspect dimensions to drawing	0.00	0.00	Sioloil	21		(40)			

W/O:			W	ORK ORDER CHANGI	ES			•	
DATE	STEP	PROCEDURE CHANGE				Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
l									
Part No	Part No: PAR #: _		Fault Ca	NCR: Yes	No DQ	A:	_ Date: _		
	Resolution:			ion:	QA: N/C CI	osed:		Date: _	· .
NCR:	-	V	WORK OR	DER NON-CONFORMA	NCE (NCR)			
		Description of NC		Corrective Action Section	on B	Verifi	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	1	tion C	Chief Eng	QC Inspector
		:							
ļ	Į.							1	

0.00

190

QC

Memo

Quality Control

QC5- Inspect part completeness to step on W/O

W/O:		WORK ORDER C	HANGES			,	
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
**************************************			· ·		ļ		
						1	
Part No	:	PAR #: Fault Category:	NCR: Yes	No DQ	A:	Date:	

Part No:		PAR #:	Fault Categ	Fault Category: NCR: Yes			_ Date: _					
	Resolution:		Disposition	sed:	Date:							
NCR:		WORK ORDER NON-CONFORMANCE (NCR)										
		Description of NC		Corrective Action Section I	Section B		Ammusial	A				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approva QC Inspect				

210 HandFinish Hand Finishing

HandFinishing

Memo Install D2680-041 Nut Plate as per Dwg D2650

N 6/1/25

0.00

0.00

Work Order ID 54918

January 7, 2010 10:51:18 AM

Junuary 7, 20	, <u> </u>	1 <i>/VI</i>									
Item ID:	D206-642-24	1	Reference:								
Revision ID: Item Name: Start Date: Required Da	Replacement 1/07/10	Skidtube Start Qty: 1.00 Req'd Qty: 1.00	Cust Item ID: Customer ID:				Cus	stomer Na	me:		
Approvals:	Process Pl	lan: Date:	Tooling:		Dat	te:					
	QC:	Date:	SPC (Y/N):	· ——	Dat	te:					
	·		Hoı	ırs			—· ·				
Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220 Quality Con		QC9- Inspect visual per QSI004- Fusion Wel	ds 0.00	0.00 Q	19 -3 PD 11	0.01.26	.				
	Memo				10-> 51	0101126					
230 Quality Con	QC ntrol Memo	QC5- Inspect part completeness to step on W	/O 0.00	0.00	o Siolo	166		(XC)	¢		
240 Hand Finish	HandFinish ning	Pressure Wash per QSI005 4.3	0.00	0.00	RD 1	12 D-	- 16	A)			
	Memo				BR 1	0 4	0	•			
250 Powder Coa	Powdercoat ating Memo	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alu AAIJ3170 START TIME: (:0c)304- OVEN TEMPERATURE: 3209- FINISH TIME: 1.3000	0.00	0.00 J		01·Z		(X)	ত		
260	QC	QC3- Inspect Part Finish	0.00	0.00	,	j			\sim		
Quality Con	ntrol Mem o			M.	d li	101	122	3 (1	X)		

January 7, 2010 10:51:18 AM

Item ID:	D206-642-24	11	Reference:	· · · · · · · · · · · · · · · · · · ·							
Revision ID:	•										
Item Name:	Replacement	Skidtube									
Start Date:	1/07/10	Start Qty: 1.00	Cust Item ID:								
Required Da	ate: 1/18/10	Req'd Qty: 1.00	Customer ID:				Cu	stomer Na	me:		
Approvals:	Process P	lan: Date:	Tooling:		Dat	te:					
	QC:	Date:	SPC (Y/N):		Dat	te:					
			Hou								
Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	HandFinish		0.00	0.00							
Hand Finis	shing Memo	HandFinishing 1- Install inserts & wearpads as per dwg D2922									
		drop of Sikaflex inside insert holes before instal wearpad/wearplate. A/R Sikaflex-29111 Sikaflex expire date: 1 2-Install D2651-3 O-Rings on D2651-1 plugs w Petroleum Jelly and install plugs as per Dwg D2 (D2650-3 detail). Clean excess adhesive. 3-Install MS27039-4-06 Screw as per DEO 915 4 -Install D2646 Aft Cap and seal with Sikaflex excess adhesive A/R Sikaflex-29111 Sikaflex expire date: 1 A/R Batch: 354	ith 2650 3. . Clean	M	k	10,	1011	28			ı
300 Quality Co	QC ontrol Memo	QC5- Inspect part completeness to step on W/O	0.00	0.00	> S not on	129		1 (4)			

0.00

0.00

320

QC

Memo

Quality Control

QC21- Final Inspection - Work Order Release

10/02/04 Adt mx 10-2-3

Picklist Print

January 7, 2010 10:50:38 AM

Work Order ID: 54918

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

Parent Item:

IPP Rev: 04.12.02 | Revised procedural steps| | KJ/JLM | IPP RevP: revise and

update route/bom DD 10.01.06 verified by:EC



Start Date: 1/07/10

Start Qty: 1.00

Required Date: 1/18/10

Required Qty: 1.00

Component	Item	ID/
Item Name		
D3286-1		

Replacement Mfg/ Item ID

Purch Manufactured

Manufactured

Bin Primary Item Location No

Last Location Route Unit of Seq ID Each

Measure Hand 45.0000

Oty on Remaining Qty To Pick 2.0000

Oty Issued Date Issued

Status

Page 1



Doubler

<u>Warehouse</u>	<u>Lo</u>	c Oty	Loc Code		
Location					
Main Warehouse					
ST		45			
47692		15			 110/1/2
52844		30			 10/1/21
	110	Each	7.0000	1.0000	

D2647

Cap

Warehouse	Loc Oty	Loc Code
Location		

110

110

Main Warehouse

10773

ST

7 7

57.0000

1.0000

10/01/07

Manufactured

Extrusion Round 3" 206

Warehouse Location	Loc Oty	Loc Code	
Main Warehouse			
ST	57		
43969	57		

Each

No

2 54448



W/O:	T		WO	RK ORDER CHANG	ES				•	·····•	
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву		Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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			,								
	·										
Part No: PAR		PAR #:	Fault Category: N			es No	DQA	۱:	Date:		
Resolution:			Disposition: Q			Clos	ed:		Date:		
NCR:			WORK ORDE	R NON-CONFORMA	NCE (N	CR)					
DATE	OTED	Description of NC		Corrective Action Section			Verific	ation	Approval	Approval	
DATE	SIEP	TEP Section A	Initial Chief Eng	Action Description Chief Eng	Sig Da	n & ate	Section C		Chief Eng	QC Inspector	
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							-				

January 7, 2010 10:50:39 AM

Work Order ID: 54918

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev: 04.12.02 Revised procedural steps[|KJ/JLM | IPP RevP: revise and

No

update route/bom DD 10.01.06 verified by:EC11

Start Date: 1/07/10

Required Date: 1/18/10

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name

D2654-3

Replacement Mfg/ Item ID

Purch Manufactured

Purchased

Bin Primary Item Location No

Last Location

Route Seq ID 180

Unit of Measure Hand Each

Oty on 6.0000

Remaining Qty Oty To Pick Issued 1.0000

Date Issued

Status

Web

Warehouse Loc Qty Loc Code Location 355041 Main Warehouse ST 6

48679

180

286.0000 52.0000

110/1/21

410/1/21

Cherry Rivet

CR3212-4-04

Warehouse	Loc Qty	Loc Code	
Location			
Main Warehouse			
ST	286		
109297	26		
109740	16		
110153	6		
111127	78		
112314	20		62
112612	140		

Each

W/O:				WORK ORDER	CHANGES				•	
DATE	STEP		PRO	OCEDURE CHANGE	E	Зу	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								ļ		
								-		
						j			,	
Part No):		PAR #:	Fault Category:	NCR:	Yes	No DQ	A :	Date: _	
	Da	esolution:		Disposition:	OA: N	/C C	losed:		Date:	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
		Description of NC		Corrective Action Section B	Verification	Annroyal	Approval				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	QC Inspector			
п											
						1					

January 7, 2010 10:50:39 AM

Work Order ID: 54918

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev: 04.12.02□Revised procedural steps□KJ/JLM IPP RevP: revise and

update route/bom DD 10.01.06 verified by:EC[]

Start Date: 1/07/10

Required Date: 1/18/10

Start Oty: 1.00

Required Oty: 1.00

Component Item ID/ Item Name

D2649

Item ID

Replacement Mfg/ Purch Manufactured

Manufactured

Bin Primary Location Item No

Last Location

Route Seq ID 200

Unit of Measure Each

Qty on Hand 202.0000 18.0000

Remaining Qty To Pick

Qty Date Issued Issued

Status

Cross Bolt Spacer

Warehouse	Loc Q	<u>)ty</u>	Loc Code				
Location							
Main Warehouse							
LG		83					,)
51529		83			_/8	_ <i>&E</i> _	10/01/25
Main Warehouse							1 /00
ST		119				_	
36013		5				_	
47112		110				_	
48271		4				_	
	200	Each	31.0000	2.0000			

Loc Code

D3286-3

Spacer

Warehouse Loc Qty Location Main Warehouse ST 31 35048 41900 46643 29

2 8F 10/01/25

W/O:

DATE	STEP	Р	ROCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Category:	NCR	: Yes	No DQ	۱:	_ Date: _	
		Pasalutian.	Dianacition	04.	N/C C	Nogod:		Deter	

WORK ORDER CHANGES

NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
		Description of NC Section A		Corrective Action Section B	Verification	Annroval	Approval				
DATE	STEP		Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	QC Inspector			
								:			
								:			

January 7, 2010 10:50:40 AM

Work Order ID: 54918

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

Parent Item:

IPP Rev: 04.12.02 Revised procedural steps [] KJ/JLM IPP RevP: revise and

update route/bom DD 10.01.06 verified by:EC□

Purchased

Start Date: 1/07/10

Required Date: 1/18/10

Start Oty: 1.00

Required Oty: 1.00

Component Item ID/ Item Name D2680-041

Item ID

Replacement Mfg/ Purch Manufactured Bin Primary Item Location No

No

Last Location

Route Seq ID 210

210

Unit of Measure Each

Qty on Hand 65.0000

Loc Code

Remaining Oty To Pick Issued 1.0000

Date Issued

410/1/25

Qty

Status

Nut Plate

Warehouse Location Main Warehouse

ST

33061 44086 1355366

65 64 Each

274.0000 2.0000

Cherry Rivet

CR3212-4-03

Warehouse Location Main Warehouse ST

111359 112314

Loc Qty

274

84

190

Loc Qty

Loc Code

2 h0/1/25

W/O:			WORK ORDER (CHANGES								
DATE	STEP	PR	OCEDURE CHANGE	В	y Da	ate C	Appro Chief Er Prod M	ng / Changeter				
Part No	:	PAR #:	Fault Category:	NCR:	Yes No	DQA: _	Date	ə:				
	Resoluti	on:	Disposition:	QA: N	C Close	d:	Date	e:				

NCR:			WORK ORDE	R NON-CONFORMAN	CE (NCR)			
		Description of NC		Corrective Action Section B	Verification	Approval	Annroyal	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspector
-								
							1	
NOTE: D	ate & initial a	Il entries						

January 7, 2010 10:50:40 AM

Work Order ID: 54918

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev: 04.12.02 Revised procedural steps [] KJ/JLM IPP RevP: revise and

update route/bom DD 10.01.06 verified by:ECFI

Start Date: 1/07/10

Required Date: 1/18/10

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name CCR264SS3-3

Replacement Mfg/ Item ID

Purch Purchased

Bin Primary Item Location No

Last Location

Route Seq ID 210

Unit of Measure Hand Each

Remaining Oty on 333.0000 2.0000

Oty Qty To Pick Issued Date Issued

Status

Cherry Rivet

Warehouse	<u>Lo</u>	c Oty	Loc Code	
Location				
Main Warehouse				
ST		333		
111548		20		
111827		1		
112314		20		
113064		92		
113539		200		
	270	Each	63.0000	1.0000

Manufactured

No

Aft Cap

D2646

Warehouse Loc Qty Loc Code	
Location Edit Off	
Main Warehouse	
FP6 29	
52663 29	
Main Warehouse	
fp7 13	
52663	
Main Warehouse	
ST 21	
46327 4	
48109	— X —

IX M.L Wolol 28

W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				

Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
	Resolution:	Disposition:	QA: N/C Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)										
		Description of NC		Corrective Action Section B		Verification	Approval	Approval				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector				
				·		:						

Picklist Print

Page 6

January 7, 2010 10:50:41 AM

Work Order ID: 54918

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

Parent Item:

IPP Rev: 04.12.02 Revised procedural steps [] KJ/JLM IPP RevP: revise and

update route/bom DD 10.01.06 verified by:EC!.

Start Date: 1/07/10

Required Date: 1/18/10

Start Oty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name D2651-1

Replacement Mfg/ Item ID

Purch Manufactured

Bin Primary Item Location No

Last Location

Route Seq ID 270

Unit of Measure Each

Oty on Hand 594.0000 18.0000

Remaining Qty Oty To Pick Issued

Date Issued

Status

Plug

Warehouse	<u>L</u>	oc Oty	Loc Code
Location			
Main Warehouse			
fpa		295	
53349		295	
Main Warehouse			
ST		299	
43990		57	
51530		242	
	270	Each	1,489.000 1.00

3x m-1 10/01/28 15x m-1 w/01/28

Washer

AN960JD416

Purchased

No

000

NAS1149 DO463 J

Warehouse	Loc Qty	Loc Code
Location	111000	•
Main Warehouse	113288	
ST	1489	
103691	20	
104215	6	
108161	329	
110523	340	
111279	101	
111916	482	
112314	211	
16941	0	

X	m-h	Woll	28
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W/O:		WORK ORDER CHANGES										
DATE	STEP	PRO		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
Part No	Part No: PAR #:		Fault Categ	ory:	_ NCR:	R: Yes No DQA:			Date:			
Resolution:		Disposition	:	_ QA: I	WC Cld	sed:		Date: _				
NCR:			WORK ORDE	R NON-CONFORM	ANCE	(NCR)					
DATE	STEP	Description of NC	ļ	······································	Section B		Verific	cation	Approval	Approval		
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	Secti		Chief Eng	QC Inspector		
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						<u> </u>						

Picklist Print

January 7, 2010 10:50:41 AM

Work Order ID: 54918

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev: 04.12.02 Revised procedural steps KJ/JLM IPP RevP: revise and

No

No

update route/bom DD 10.01.06 verified by:ECU

Start Date: 1/07/10

Required Date: 1/18/10

Page 7

Start Otv: 1.00

Required Oty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2651-3		Manufactured	No			270	Each	783.0000	18.0000			



O-Ring

Warehouse	Lo	c Qty	Loc Code
Location			
Main Warehouse			
ST		783	
43849		3	
46114		780	
	270	Each	2.792.000 46.000

18x m-L 14/01/28

MS27039-1-08 Purchased Screw

Warehouse Loc Qty Loc Code Location

Main Warehouse

ST

2,651.000 44.0000

46x m/2 10/01/28

Purchased

Insert

ALS4-1032-130

Warehouse Loc Qty Loc Code Location

270

Main Warehouse

2651 2651

44x m. 1 Wolla8

W/O:		The state of the s	CHANGES					
DATE	STEP		PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No):	PAR #:	Fault Category:	NCR: Yes	No DQ	A :	Date:	
	D	noolution.	Diamonitian	0.4. 1//0.0	Naa-d.		D-4	

NCR:			WORK ORDER NON-CONFORMANCE (NCR)									
	1	Description of NC		Corrective Action Section 6	 3	Verification	Approval Chief Eng	A				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C		Approval QC Inspecto				
						,						

January 7, 2010 10:50:43 AM

Work Order ID: 54918

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev: 04.12.02 [] Revised procedural steps [] KJ/JLM IPP RevP: revise and

update route/bom DD 10.01.06 verified by:EC[7]

Purchased

Start Date: 1/07/10

Required Date: 1/18/10

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name

Item ID

Replacement Mfg/ Purch

Bin **Primary** Item Location Last Location Route

Unit of Oty on Measure

Remaining Oty To Pick

Oty Issued Date Issued

Status

MS27039-4-06

Purchased

No

No

Seq ID 270

Hand Each 57.0000

1.0000

Loc Code

Screw

Warehouse Location

Main Warehouse

57 57 270 Each

Loc Qty

4,821.000 46.0000

12 m/ 10/01/28

Washer

AN960JD10L

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	4821	
101291	16	
104885	16	
105793	185	
109632	170	
(110985)	4434	

46x m. 10/01/28

_									•
W/O:		William State of the State of t	WO	RK ORDER CHANGES					
DATE STEP		PRO	OCEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Categ	jory: N	ICR: Yes	No DQ	A:	Date:	
	Res	solution:	Disposition	ı: (A: N/C C	losed:		Date: _	
NCR:			WORK ORDE	R NON-CONFORMAN	CE (NCI	₹)			
DATE	STEP	Description of NC Section A	Initial	Corrective Action Section E Action Description			cation on C	Approval Chief Eng	Approval QC Inspector
		Section A	Chief Eng	Chief Eng	Date		On C	Criter Eng	QC Inspector

January 7, 2010 10:50:49 AM

Work Order ID: 54918

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev: 04.12.02[] Revised procedural steps[]KJ/JLM IPP RevP: revise and

update route/bom DD 10.01.06 verified by:EC[]

Start Date: 1/07/10

Required Date: 1/18/10

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name

D3537-1

Replacement Mfg/ Item ID

Purch Manufactured

Manufactured

No

Bin Primary Item Location No

Last Location Route Seq ID 270

Unit of Measure Each

Qty on Hand 141.0000 4.0000

Loc Code

Remaining Qty Qty To Pick Issued

Date Issued

Status

D3537-3

<u>Warehouse</u>	Loc Qty	Loc Code
Location		
Main Warehouse		
FP .	2	
48288	2	
Main Warehouse		
FP17	139	
51678	34	
(51679)	105	
	270 Each	40.0000 1.0000

4x m/L voloil 28



117		

Warehouse	Loc Qty
Location	
Main Warehouse	
ST	40
33881	6
35697	34



W/O:				WORK ORDER CHANGES						
DATE	STEP		PRO	CEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								:		ļ
								<u> </u>		
Part No	:		PAR #:	Fault Category:	NCI	R : Yes	No DQ	A:	Date: _	
	Res	solution:		Disposition:	QA:	: N/C C	Closed:		Date: _	

	WORK ORDER NON-CONFORMANCE (NCR)									
	Description of NC	Posseription of NC Corrective Action Section B			Verification	A	A			
STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspector			
	STEP	STEP Description of NC	STEP Description of NC Section A Initial	STEP Description of NC Section A Initial Action Description	STEP Description of NC Section A Initial Action Description Sign &	STEP Description of NC Section A Initial Action Description Sign & Section C	STEP Description of NC Section A Initial Action Description Sign & Verification Section C Chief Eng			

January 7, 2010 10:50:50 AM

Work Order ID: 54918

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev: 04.12.02□Revised procedural stepsUKJ/JLM IPP RevP: revise and

No

No

update route/bom DD 10.01.06 verified by:ECC

Start Date: 1/07/10

Required Date: 1/18/10

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name

D3535-13

Replacement Mfg/ Item ID

Purch Manufactured

Manufactured

Manufactured

Bin Primary Item Location No

Last Location

Route Seq ID 270

Unit of Measure Each

Qty on Hand 21.0000

Loc Code

Remaining **Oty To Pick** 1.0000

Qty

Issued

Date Issued Status

Wearshoe

Warehouse Loc Oty Location Main Warehouse

ST

17.0000

1.0000

1× M. 1. 10/01/28

D3536-13

Gasket

Warehouse Location Main Warehouse

Loc Oty

Loc Code

17 17 270 Each

270

1.0000 9.0000

Loc Code

1x m/2 10/01/28

D3535-21

Wearshoe

Location Main Warehouse

Warehouse

Loc Qty

TX M/2 10/01/28

	WORK ORDER CH	HANGES					
STEP	PROCEDURE CHANGE	Ву	By Date		Approval Chief Eng / Prod Mgr	Approval QC Inspector	
					;		
		1981					
	STEP		STEP PROCEDURE CHANGE By		STEP PROCEDURE CHANGE By Date Qty	STEP PROCEDURE CHANGE By Date Qty Approval Chief Eng / Prod Mgr	

Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
	Resolution:	Disposition:	QA: N/C Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification	Annroyal	Ammerical			
			Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector			
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			1 1		1	1		 			

Picklist Print

Page 11

January 7, 2010 10:50:55 AM

Work Order ID: 54918

Parent Item:

D206-642-241

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev: 04.12.02 [Revised procedural steps[]KJ/JLM IPP RevP: revise and

update route/bom DD 10.01.06 verified by:ECL

Start Date: 1/07/10

Required Date: 1/18/10

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name

D3536-21

Replacement Item ID

Mfg/ Purch Manufactured

Manufactured

Manufactured

No

Bin Primary Item Location No

Last Location Route Seq ID 270

Unit of Oty on Measure Hand Each 14.0000

Remaining Qty To Pick 1.0000

Otv Issued Date Issued

Status

Gasket

Warehouse Loc Qty Loc Code Location Main Warehouse ST 14 2 12 270 Each 13.0000 No



IX m & Worlas

Wearshoe

D3536-33

D3535-33

<u>Warehouse</u>	<u>L</u> c	oc Qty	Loc Code	
Location				
Main Warehouse				
FP /		13		
(51647)		13		
	270	Each	12.0000	1.0000



IX m. Lwoil 28

Gasket

Loc Qty Warehouse Loc Code Location Main Warehouse 12 12

IX Min Worlas

W/O:			WO	RK ORDER CHANG	ES				
DATE	STEP	PRO	OCEDURE CHAN	GE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
· · · · · · · · · · · · · · · · · · ·									
Part No	•	PAR #:	Fault Categ	ory:	_ NCR: Ye	s No D	QA:	Date: _	
	Resolution:		Disposition: QA		_ QA: N/C	Closed: _		Date: _	
NCR:			WORK ORDE	R NON-CONFORMA	ANCE (NO	CR)			
DATE	STEP	Description of NC			on B	Ver	ification	Approval	Approval
	0.2.	Section A	Initial Chief Eng	Action Description Chief Eng	Sig Da		ection C	Chief Eng	QC Inspector

QTY -1	QTY -3	Q17	QTY -7	PART NUMBER	DESCRIPTION	7
Х				D2650-1	SKIDTUBE ASSEMBLY	7
	X			D2650-3	SKIDTUBE ASSEMBLY	7
	1	х		D2693-5	SKIDTUBE ASSEMBLY	7
			X	02650-7	SKIDTUBE ASSEMBLY	
1	1	1	1	D2600-1-160	EXTRUSION	
1				D2654-1	1 STATES	7
	1			D2654-3	/EB	7
		1		D2654-5	. ₩VEB	7
			1	D2654-7	WEB	7
1	1	1	1	D2646	AFT CAP	7
1	1	1	1	D2647	CAP	7 ,
17	18	19	23	D2649	CROSS BOLT SPACER	Ⅎϟϝ∖
16	18	14	22	D2651-1	PLUG	
16	18	14	22	D2651-3	O-RING]
1	1	ţ	1	D2690-041	NUT PLATE	
2	2			D3286-1	DOUBLER	
2	2			£33286-3	STUD	4
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)	
2	2	2	2	AN960JD10L	WASHER	7
2	2	2	2	CCR264SS3-3	RIVET	7
2	2	2	2	CR3212-4-03	RIVET	7
2	2	2	2	MS27839-1-08	SCREW	7
1	1	1	1	MS27039-4-06	SCREW	7
1	1	1	1	AN960JD416	WASHER	7
52	52			CR3212-4-04	RIVET	7

MATERIAL: N/A

FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3

-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER

DART OSI 905 4.4

TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

UNITS: INCHES UNLESS OTHERWISE NOTED

BREAK SHARP EDGES: 0.005 TO 0.010 MAX

IDENTIFICATION: NONE

WEIGHT: N/A

WELD PER DART QSI 004

DAMAGE TOLERANCE ON FWD BEND:

THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE \odot GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A

MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.

) BOND WEB INTO OUTER TUBE WITH SIXAFLEX-2411-291 ADHESIVE PER DART QSI 015

) INSERT D2651-1 PLUG CAW D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

DRILL 00.257 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5

TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.

) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY RETURN TO **ENGINEERING UNCONTROLLED COP** SUBJECT TO AMENDMENT WITHOUT NOTICE

WORK ORDER NO. 54918. 3/10-1-05

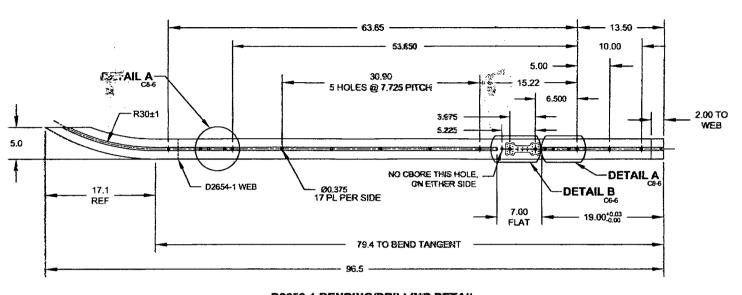
REV.	DESCRIPTION	£Y	DATE
Α	NEW ISSUE	CS	97.03.25
В	AS MANUFACTURED CHANGES	es	97.06.26
С	CHANGE HOLE PATTERN AND FRONT END	DS.	97.10.29
D	REDRAW; INCORP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CF	04.05.17
E	RMOVE CBORE, CHG DRILL, ADD CHAMFER	C P	06.03.30
F	DRAWING UPDATED TO CURRENT STANDARDS, SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERED TO SHT 6. SHT 1 IN PL PART D2649 GTY UPDATED, SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	30.20.20

DESIGN	DS	DART AEROSPACE USA	A, INC	
DRAWN	AJS	PORT HADSOCK, WA		
CHECKED	1	DRAWING NO.	REV. F	
MFG. APPR.	E	D2650 st	EET 1 OF 6	
APPROVED	10	TITLE	SCALE	
DE APPR.	-4	206/407 SKIDTUBE ASSEMBLIES	NTS	
DATE 08.0	80.80	COPYRIGHT © 1937 BY IDERT SCHOOSPACE USA, BIC THIS DOCUMENT IS MANY & AND COMPRESSIONAL HICK IS SEPRINGED ON THE ISSURED SHAPE CONTINUE THAT THIS MICTIONS USED FOR ANY PROPOSE OR COMPRESSION OF THE STORY OF THIS PERSON MICHIGAN		

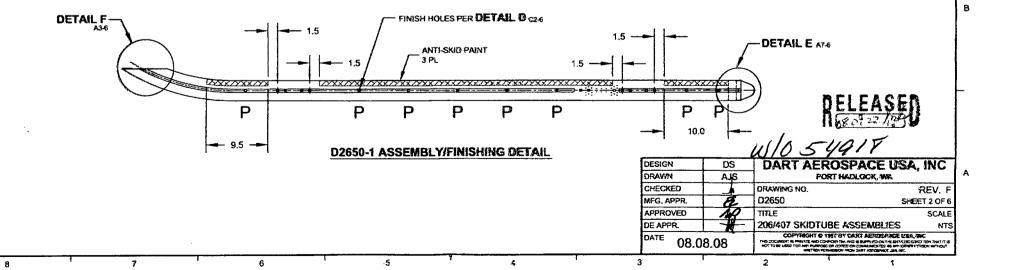
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DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No		DAD #: Foult Cotogowy		No DOA		Doto	

Part No:		PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
	Resolution:		Disposition:	QA: N/C Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
DATE	0777	Description of NC		Corrective Action Section B		Verification	Approval Chief Eng	Annua			
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C		Approval QC Inspecto			
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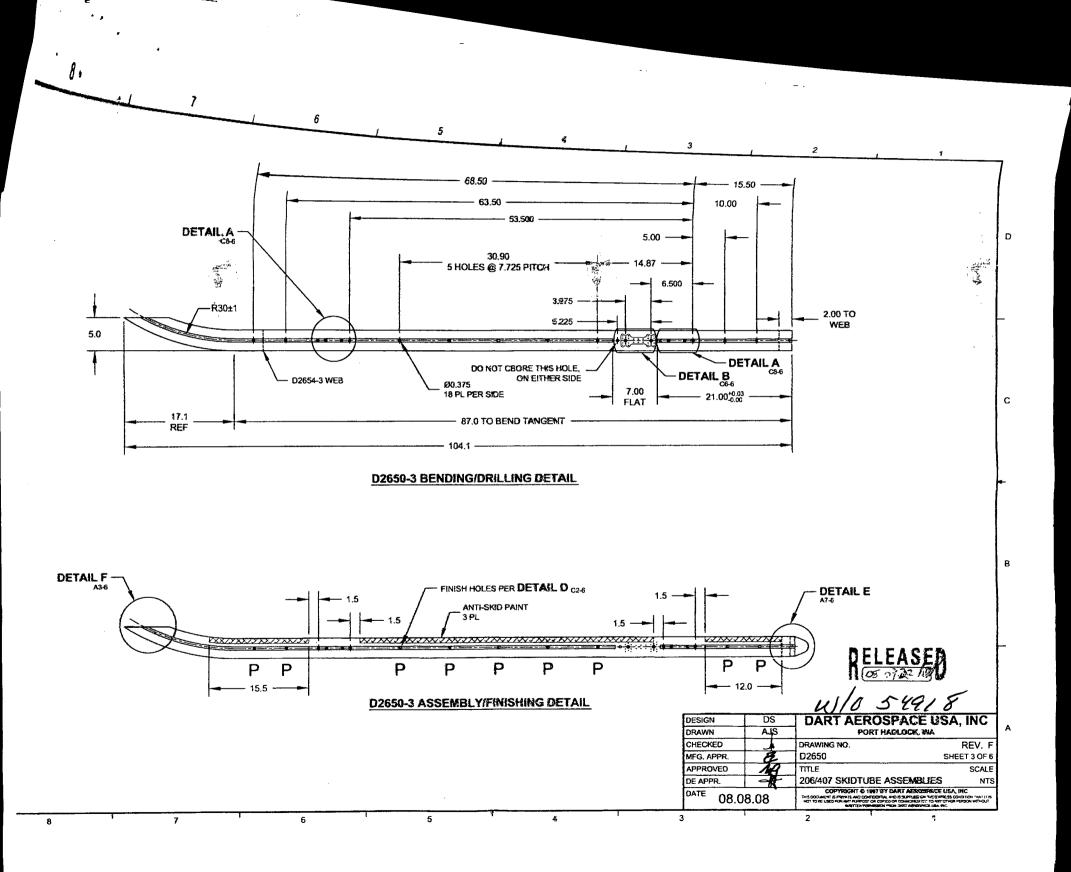




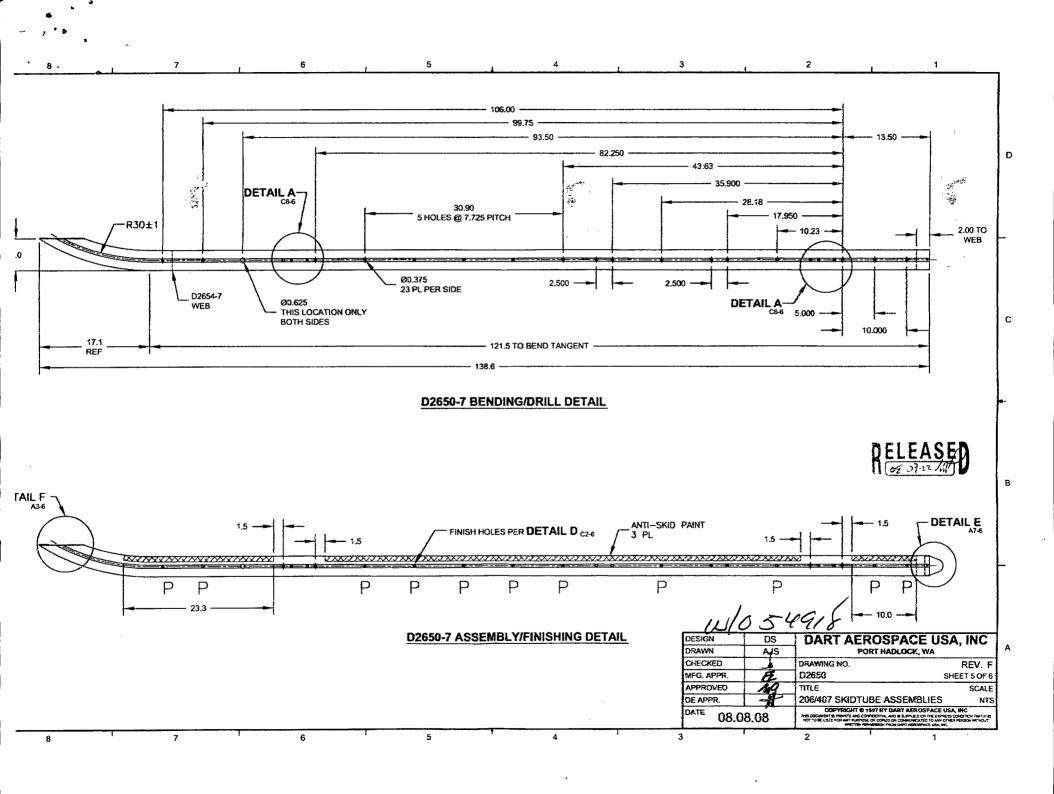
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DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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Part No: _		_ PAR #:	Fault Category:	NCR: Yes No	DQA:	Date:	
	Resolution:		Disposition:	QA: N/C Closed	l:	Date:	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
	T	Description of NC		Corrective Action Section B	_	Verification	Approval Chief Eng	T		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C		Approval QC Inspector		
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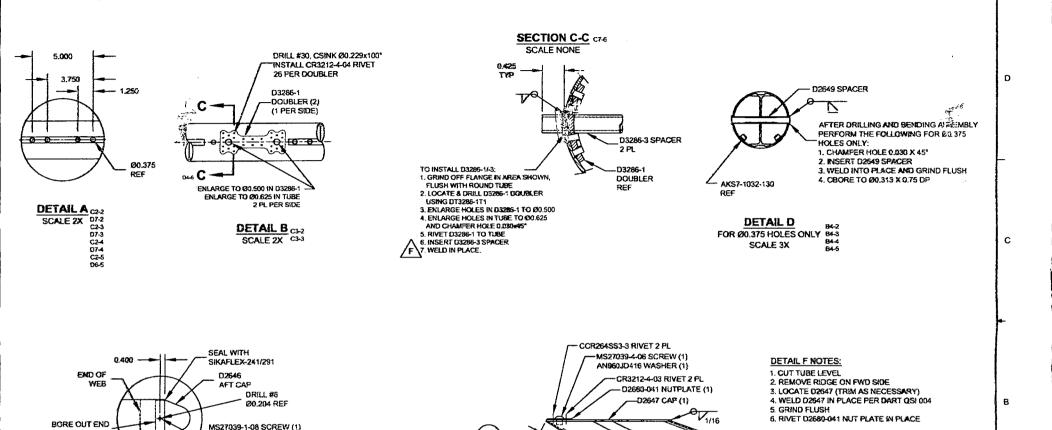
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							Prod Mgr	Epprova
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Part No		PAR #:	Fault Cate	gory:	NCR: Yes	No DOA:	Date:	
	Reso	lution:	Disposition:		QA: N/C CI	osed:	Dute: _	
NCR:			WORK ORDE	R NON-CONFORMA	NCE (NCF	R)		
DATE	STEP	Description of NC		Corrective Action Section	n B	Marië ani		T
	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approva QC Inspect



W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
					•				
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Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resolut	ion:	Disposition:	QA: N/C Closed:	Date:

	WORK ORDER NON-CONFORMANCE (NCR)							
	Description of NC	Corrective Action Section B		Description of NC Corrective Action S		Verification	Approval	Approval
SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspecto	
							_	
	STEP	STEP Description of NC	STEP Description of NC Section A Initial	STEP Description of NC Corrective Action Section B Section A Corrective Action Section B	STEP Description of NC Section A Initial Action Description Sign &	STEP Description of NC Section A Initial Action Description Sign & Section C	STEP Description of NC Section A Initial Action Description Sign & Verification Section C Chief Eng	



REMOVE RIDGE ON INSIDE OF SKIDTUBE

LEAVE 0.070 MIN

DETAIL E B2-2 SCALE 2X B2-3 B1-4 AN960JD10L WASHER (1)

DETAIL F SCALE NONE 88-3 88-4 W/O 54918

NOTE: MASK THREADS IN 02680-041 PRIOR

TO FINISH

OESIGN	DS	DART AEROSPACE USA, IN			
DRAWN	AJS	PORT HADLOCK, WA			
CHECKED		DRAWING NO.	REV. F		
MFG. APPR.	歷	D2650 sh	EET 6 OF 8		
APPROVED	10	TITLE	SCALE		
DE APPR.		206/407 SKIDTUBE ASSEMBLIES			
DATE 08.08.08		COPYRIGHT © 1997 BY SART ASPOSPACE USA, INC THIS DOCUMENT IN THIS DOCUMENT IS WELL OF THE COPYEST CONTINUENT IT IS NOT TO BE USED FOR WELL OF THE PROPERTY OF			

08.08.08 (WITHOUSE PRODUCTION AND ADDRESS OF THE PRODUCTION AND AD

ORIENTATION OF

D2680-041

8

OF SKIDTUBE

TO 0.75 DEPTH

AND 0,070 WALL

Dart Aerospace	Ltd
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W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
		•				·			

Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
	Resolution:	Disposition:	QA: N/C Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC	Corrective Action Section B			Verification	Approval	Annua	
DATE S	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspector	
		J.							

NO. alle

AWS D17.1.2001 QUALIFICATION TEST RECORD

Name: Bardon Elliott	
Job number: 5306 53867	
Part number: Dade 642.541	
Description: <u>ack</u> skid	
Welding Process: Tig[/] Mig[]	
Base materiel: Aluminian	
Current: AC[] DC[]	

TEST REQUIREMENTS AND RESULTS

Visual: Penetration:	pass[] pass[]	fail[] fail[]
<u>UNACCEPTABLE</u>		
Cracks: Undercut: Pin holes: Overlap (cold lap) Porosity (surface): Coloration:	pass[/] pass[/] pass[/] pass[/] pass[/]	fail[] fail[] fail[] fail[] fail[]
Qualifier of a Soul Welder Brocay Elliot		est Coupon <u>09. 11. 10</u>

The above named individual is qualified in accordance with AWS D17.1.2001 to weld